LISTING AND AMENDMENT OF THE CLAIMS

1. (Previously presented) A method for investigating a body fluid for disseminated cancer cells, which comprises:

- obtaining a cell-containing fraction from the body fluid with enrichment of cancer cells and determining in the cell-containing fraction the expression of at least 2 genes which are selected from the group consisting of

    i) manganese superoxide dismutase genes;

    ii) thioredoxin reductase 1 genes; and

    iii) glutathione peroxidase 1 genes;

- providing a further cell-containing fraction of the body fluid or of a comparable biological sample and determining the expression of the genes in the further cell-containing fraction; and
- comparing the expression for each gene in the cell-containing fraction with its expression in the further cell-containing fraction,

wherein the body fluid is selected from blood and bone marrow and an elevated expression of each gene determined in the cell-containing fraction as compared to its expression in the further cell-containing fraction indicates the presence of ~~presence of~~ disseminated cancer cells in the body fluid.

2. (Previously presented) The method as claimed in claim 1, wherein the expression of at least one manganese superoxide dismutase gene, of at least one thioredoxin reductase 1 gene and of at least one glutathione peroxidase 1 gene is determined.

3. (Previously presented) The method as claimed in claim 1, wherein the body fluid is blood.

4. (Previously presented) The method as claimed in claim 1, wherein obtaining the cell-containing fraction from the body fluid with enrichment of cancer cells comprises passing the body fluid or parts thereof through a screen with a mesh or pore width of about 10 to 200 μm and obtaining the cell fraction retained on the screen.

5. (Canceled)

6. (Previously Presented) The method as claimed in claim 1, wherein the comparable biological sample is derived from the individual whose body fluid is investigated for cancer cells.

7-10. (Canceled)

11. (Previously Presented) The method as claimed in claim 1, wherein the expression of at least one manganese superoxide dismutase gene

and of at least one further gene selected from thioredoxin reductase 1 genes and glutathione peroxidase 1 genes is determined.

12. (Previously Presented) The method as claimed in any of claim 1, which is for identifying disseminated cancer cells in the body fluid.

13. (Canceled)

14. (Currently amended) The method as claimed in ~~any of~~ claim 15, which is for diagnosis of a tumor.

15. (Previously presented) The method as claimed in claim 1, wherein the elevated expression of at least one of said genes indicates the presence of a tumor.

16. (Currently Amended) The method as claimed ~~in any of~~ in claim 17, which is for estimating the risk to develop a metastasis or a recurrence.

17. (Previously presented) The method as claimed in claim 1, wherein the elevated expression of at least one of said genes indicates a risk to develop a metastasis or a recurrence.

18. (Previously presented) The method as claimed in claim 1, wherein the genes are human genes.

19. (Previously presented) The method as claimed in claim 1, wherein the manganese superoxide dismutase gene encodes a protein having an amino acid sequence as set forth in SEQ ID NO: 13 or an allelic variant thereof.

20. (Previously presented) The method as claimed in claim 1, wherein the manganese superoxide dismutase gene encodes an mRNA which is capable of being amplified using the primer sequences as set forth in SEQ ID NO: 1 and SEQ ID NO: 2.

21. (Previously presented) The method as claimed in claim 1, wherein the thioredoxin reductase 1 gene encodes a protein having amino acid sequence as set forth in SEQ ID NO: 15 or an allelic variant thereof.

22. (Previously presented) The method as claimed in claim 1, wherein the thioredoxin reductase 1 gene encodes an mRNA which is capable of being amplified using the primer sequences as set forth in SEQ ID NO: 4 and SEQ ID NO: 5.

23. (Previously presented) The method as claimed in claim 1, wherein the glutathione peroxidase 1 gene encodes a protein having an amino acid sequence as set forth in SEQ ID NO: 17 or allelic variant thereof.

24. (Previously presented) The method as claimed in claim 1, wherein the glutathione peroxidase 1 gene encodes an mRNA which is capable of being amplified using the primer sequences as set forth in SEQ ID NO: 7 and SEQ ID NO: 8.

25. (Previously presented) The method as claimed in claim 1, wherein determining the expression of the gene comprises determining mRNA expressed by the gene.